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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/042,068   | 01/08/2002  | Tomokuni Wauke       | 9281-4240              | 3902             |
| 7590   | 12/17/2003  |                      |                        |                  |
| Brinks Hofer Gilson & Lione<br>P.O. Box 10395<br>Chicago, IL 60610 |             |                      | EXAMINER<br>LE, DANG D |                  |
|  |             |                      | ART UNIT<br>2834       | PAPER NUMBER     |

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/042,068

Applicant(s)

WAUKE, TOMOKUNI

Examiner

Dang D Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 3-8, 11-35 and 37-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9, 10 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I including claims 1, 2, 9, 10, and 36 in Paper dated 10/03/03 is acknowledged. The examiner agrees that claims 1, 11, 21, and 36 are generic linking claims and the allowability of the claim will result in the examination of appropriate withdrawn claims.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 2, 9, 10, and 36 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Lehman et al. (2,867,762).

Regarding claim 1, Lehman et al. show an inner rotor motor (Figure 1) comprising:

- A rotor (15 not 11) having a plurality of permanent magnetic poles circumferentially arranged; and

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- A stator (18) having a stator core that includes a plurality of magnetic pole teeth opposing a circumference of the rotor,
- A coil (16, 17) being provided on each of the magnetic pole teeth, wherein the stator extends not more than 180 degrees with respect to a central angle of the rotor.

Regarding claims 2 and 36, it is noted that the stator extends not more than 90 degrees with respect to the central angle of the rotor.

5. Claims 1, 2, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamura (5,341,060).

Regarding claim 1, Kawamura shows an inner rotor machine (patentable weight not given) comprising:

- A rotor (2, Figure 3) having a plurality of permanent magnetic poles (21) circumferentially arranged; and
- A stator (33) having a stator core that includes a plurality of magnetic pole teeth (31, 32) opposing a circumference of the rotor,
- A coil being provided on each of the magnetic pole teeth, wherein the stator extends not more than 180 degrees with respect to a central angle of the rotor.

Regarding claims 2 and 36, it is noted that the stator extends not more than 90 degrees with respect to the central angle of the rotor.

***Claim Rejections - 35 USC § 103***

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehman et al. in view of Tajima et al. (5,432,644).

Regarding claim 9, Lehman et al. show all of the limitations of the claimed invention except for six magnetic pole teeth being provided.

Tajima et al. show six magnetic pole teeth being provided (Figure 5) for the purpose of increasing torque.

Since Lehman et al. and Tajima et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make a stator with six teeth as taught by Tajima et al. for the purpose discussed above.

Regarding claim 10, it is noted that Tajima et al. also show all of the limitations of the claimed invention.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura in view of Sleder (4,160,435).

Regarding claim 9, Kawamura shows all of the limitations of the claimed invention except for six magnetic pole teeth being provided.

Sleder shows five magnetic pole teeth being provided (Figure 5) for the purpose of increasing output power.

Since Kawamura and Sleder are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make a stator with six teeth as taught by Sleder for the purpose discussed above.

In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the stator with six teeth, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

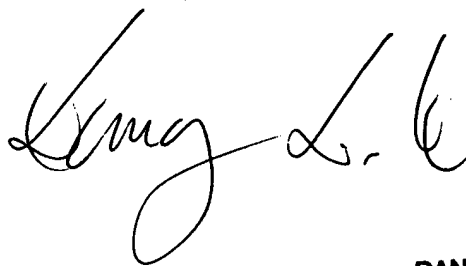
***Information on How to Contact USPTO***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

12/6/03

A handwritten signature in black ink, appearing to read 'Dang D Le', with a stylized, cursive script.

**DANG LE  
PRIMARY EXAMINER**